	Application No.	Applicant(s)
Notice of Allowability	10/769,404	BYERS ET AL.
	Examiner	Art Unit	
	MOHAMMAD A. SIDDIQI	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to <u>03/14/2008</u>.

2. ☒ The allowed claim(s) is/are <u>1-5,12-16,and 23-27(please rearrange claim 1-15)</u>.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

        a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

            1. ☐ Certified copies of the priority documents have been received.

            2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

            3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☒ Interview Summary (PTO-413), Paper No./Mail Date <u>07/17/2008</u> .

7. ☒ Examiner's Amendment/Comment

8. ☐ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

/nathan flynn/ spe 2154

DETAILED ACTION

1.   Claims 1-5,12-16,and 23-27 are allowed.

EXAMINER'S AMENDMENT

1. In view of the examiners amendment below the final rejection mailed on 7-25-

08 is vacated.

2.   An examiner's amendment to the record appears below. Should the changes

and/or additions be unacceptable to applicant, an amendment may be filed as provided

by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be

submitted no later than the payment of the issue fee.

        Authorization for this examiner's amendment was given in a telephone interview

with Gerald Maliszewski on 07/17/2008.

        The application has been amended as follows:

IN THE SPECIFICATION:

        Please amend the paragraph beginning on line 21 of page 6 as follows:

        When implemented in software, the elements of the invention are essentially the

code segments to perform the necessary tasks. The program or code segments can be

stored in a processor readable medium <u>that includes a computer readable medium and communication medium, which enable the transmission of</u> ~~or transmitted by~~ a computer data signal embodied in a carrier wave over a transmission medium or communication link. The "processor readable medium" may include any <u>computer readable </u>medium that can store or transfer information. Examples of the ~~processor~~ <u>computer </u>readable medium includes an electronic circuit, a semiconductor memory device, a ROM, a flash memory or other non-volatile memory, a floppy diskette, a CD-ROM, an optical disk, a hard disk, ect. . Examples of the communication medium includes a fiber optic medium, a radio frequency (RF) link, etc. The computer data signal may include any signal that can propagate over a transmission medium such as electronic network channels, optical fibers, air, electromagnetic, RF links, etc. The code segments may be downloaded via computer networks such as the Internet, Intranet, etc.

3. Please replace all the claims as follows:

IN THE CLAIMS:

1. (currently amended) A system comprising:

a server coupled to a network;

a network adapter to couple said server to said network, said network adapter having a plurality of adapter ports; and

an adapter driver executing on said server, said adapter driver having a plurality of instances corresponding to said plurality of adapter ports, wherein said adapter driver, in response to a graphical user interface of a driver management application request, selected from a group consisting of a driver parameter update request, a driver unload/load request, and a request to recognize a new device on said network, to change a configuration of a selected instance of said plurality of instances, is to,

parse a configuration file of said selected instance into a name/value parameter list,

retrieve a previous initialization time stamp for the selected instance, said previous initialization time stamp to indicate the last time said selected instance was initialized,

clear a plurality of old driver parameters for said selected instance,

define a plurality of new driver parameters based on said request for the configuration change,

request that said adapter driver activate said plurality of new driver parameters,

determine if there is data flow through the selected instance of said adapter driver, and if not, to

block all subsequent data flow through the selected instance of said adapter driver,

block all subsequent information requests to said adapter driver relating to the selected instance, [[and]]

reinitialize said selected instance of said plurality of instances without rebooting said server,

following said reinitialization, request a new initialization time stamp for the selected instance,

compare said new initialization time stamp to said previous initialization time stamp, and

if said new initialization time stamp is later than said previous initialization time stamp, indicate that said reinitialization of said selected instance is successful.

2. (original)   The system of claim 1, further comprising a storage coupled to said server via said network adapter, and wherein said network is a storage area network and said network adapter is a Fiber Channel adapter with PCI-X connectivity.

3. (original)   The system of claim 2, wherein said server is one of a Solaris™ server and a Windows™ server.

4. (original)   The system of claim 1, wherein said adapter driver manages at least said plurality of adapter ports of said network adapter, and wherein each of said plurality of adapter ports are referenced individually on a per-instance basis by said adapter driver.

5.   (original)   The system of claim 4, wherein said adapter driver further manages a second network adapter having a second plurality of adapter ports, and wherein each of said second plurality of adapter ports are also referenced individually on a per-instance basis by said adapter driver.

6-11.   canceled

12.   (currently amended) A method comprising:

executing an adapter driver on a server that is coupled to a network, said server being coupled to the network using a network adapter, and said adapter driver having a plurality of instances corresponding to a plurality of adapter ports of said network adapter;

issuing, by a user using a graphical user interface of a driver management application, a request to change the configuration of said selected instance, wherein said request is one of a driver parameter update request, a driver unload/load request, and a request to recognize a new device on said network;

parsing, by said driver management application, a configuration file of said selected instance into a name/value parameter list;

retrieving, by said driver management application, a previous initialization time stamp for the selected instance, said previous initialization time stamp to indicate the last time said selected instance was initialized;

clearing, by said driver management application, a plurality of old driver parameters for said selected instance;

defining, by said driver management application, a plurality of new driver parameters based on said request for the configuration change;

requesting, by said driver management application, that said adapter driver

activate said plurality of new driver parameters;

receiving [[a]] said request to change a configuration of a selected instance of

said plurality of instances;

determining if there is data flow through the selected instance of said adapter

driver;

blocking, if there is no data flow through the selected instance, all subsequent

data flow through the selected instance of said adapter driver;

blocking, if there is no data flow through the selected instance, all subsequent

information requests to said adapter driver relating to the selected instance; [[and]]

reinitializing said selected instance of said plurality of instances without rebooting

said server;

following said reinitialization of the selected instance of said plurality of instances,

requesting, by said driver management application, a new initialization time stamp for

the selected instance;

comparing said new initialization time stamp to said previous initialization time

stamp; and

indicating that said reinitialization of said selected instance is successful if said

new initialization time stamp is later than said previous initialization time stamp.

13.   (original)   The method of claim 12, wherein said executing the adapter

driver comprises executing the adapter driver on said server that is coupled to said

storage area network, said server being coupled to the storage area network using a

Fibre Channel network adapter with PCI-X connectivity, and said adapter driver having

said plurality of instances corresponding to said plurality of adapter ports of the network adapter.

14.   (original)   The method of claim 13, wherein said executing the adapter driver comprises executing the adapter driver on said server that is coupled to said storage area network, said server being one of a Solaris™ server and a Windows™ server and being coupled to the storage area network using the Fibre Channel network adapter with PCI-X connectivity, and said adapter driver having said plurality of instances corresponding to said plurality of adapter ports of the network adapter.

15.   (original)   The method of claim 12, further comprising:
       managing, by said adapter driver, at least said plurality of adapter ports of said network adapter; and
       referencing said plurality of adapter ports individually on a per-instance basis by said adapter driver.

16.   (original)   The method of claim 15, further comprising:
       managing, by said adapter driver, a second network adapter having a second plurality of adapter ports; and
       referencing said second plurality of adapter ports individually on a per-instance basis by said adapter driver.

17-22. canceled

23.   (currently amended) A computer program product comprising:

a processor readable medium including a computer readable ~~tangible~~ medium having stored therein:

computer readable program code to execute an adapter driver on a server that is coupled to a network, said server being coupled to the network using a network adapter, and said adapter driver having a plurality of instances corresponding to a plurality of adapter ports of said network adapter;

computer readable program code to issue, by a user using a graphical user interface of a driver management application, a request to change a configuration of said selected instance, wherein said request for the configuration change is one of a driver parameter update request, a driver unload/load request, and a request to recognize a new device on said network;

computer readable program code to parse, by said driver management application, a configuration file of said selected instance into a name/value parameter list;

computer readable program code to retrieve, by said driver management application, a previous initialization time stamp for the selected instance, said previous initialization time stamp to indicate the last time said selected instance was initialized;

computer readable program code to clear, by said driver management application, a plurality of old driver parameters for said selected instance;

computer readable program code to define, by said driver management application, a plurality of new driver parameters based on said request for the configuration change;

computer readable program code to request, by said driver management application, that said adapter driver activate said plurality of new driver parameters;

computer readable program code to receive [[a]] the request to change a configuration of a selected instance of said plurality of instances;

computer readable program code to determine if there is data flow through the selected instance of said adapter driver,

computer readable program code to block, if there is no data flow through the selected instance, all subsequent data flow through the selected instance of said adapter driver;

computer readable program code to block, if there is no data flow through the selected instance, all subsequent information requests to said adapter driver relating to the selected instance; [[and]]

computer readable program code to reinitialize said selected instance of said plurality of instances without rebooting said server;

following said computer readable program code to reinitialize said selected instance, computer readable program code to request, by said driver management application, a new initialization time stamp for the selected instance;

computer readable program code to compare said new initialization time stamp to said previous initialization time stamp; and

computer readable program code to indicate that said reinitialization of said selected instance is successful if said new initialization time stamp is later than said previous initialization time stamp.

24.   (original)   The computer program product of claim 23, wherein said computer readable program code to execute the adapter driver comprises computer readable program code to execute the adapter driver on said server that is coupled to said storage area network, said server being coupled to the storage area network using

a Fibre Channel network adapter with PCI-X connectivity, and said adapter driver
having said plurality of instances corresponding to said plurality of adapter ports of the
network adapter.

     25.   (original)   The computer program product of claim 24, wherein said
computer readable program code to execute the adapter driver comprises computer
readable program code to execute the adapter driver on said server that is coupled to
said storage area network, said server being one of a Solaris™ server and a Windows™
server and being coupled to the storage area network using the Fibre Channel network
adapter with PCI-X connectivity, and said adapter driver having said plurality of
instances corresponding to said plurality of adapter ports of the network adapter.

     26.   (original)   The computer program product of claim 23, further having:
     computer readable program code to manage, by said adapter driver, at least said
plurality of adapter ports of said network adapter; and
     computer readable program code to reference said plurality of adapter ports
individually on a per-instance basis by said adapter driver.

     27.   (original)   The computer program product of claim 26, further having:
     computer readable program code to manage, by said adapter driver, a second
network adapter having a second plurality of adapter ports; and
     computer readable program code to reference said second plurality of adapter
ports individually on a per-instance basis by said adapter driver.

     28-33. canceled

4.   Any inquiry concerning this communication or earlier communications from the
examiner should be directed to MOHAMMAD A. SIDDIQI whose telephone number is
(571)272-3976. The examiner can normally be reached on Monday -Thursday.
        If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, Nathan J. Flynn can be reached on (571) 272-1915. The fax phone number
for the organization where this application or proceeding is assigned is 571-273-8300.

        Information regarding the status of an application may be obtained from the
Patent Application Information Retrieval (PAIR) system. Status information for
published applications may be obtained from either Private PAIR or Public PAIR.
Status information for unpublished applications is available through Private PAIR only.
For more information about the PAIR system, see http://pair-direct.uspto.gov. Should
you have questions on access to the Private PAIR system, contact the Electronic
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USPTO Customer Service Representative or access to the automated information
system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MAS
        /Nathan J. Flynn/
        Supervisory Patent Examiner, Art Unit 2143